

Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A process for the solid phase synthesis of bio-oligomers ~~characterised in that~~ wherein at least one washing step is carried out in the presence of a salt $(X^{n+})_m (Y^{m-})_n$, wherein X represents a cation, n represents the charge of the cation, y represents an anion and m represents the charge of the anion.
2. (currently amended) A process for attaching an appropriately protected monomer or oligomer to another monomer or oligomer which is protected by a protecting group and which is attached to a support, comprising ~~the following steps:~~
 - a) ~~cleave~~ cleaving the protecting group from the monomer or oligomer attached to the support; ~~and then~~
 - b) ~~perform~~ performing a thorough washing; ~~and then~~
 - c) ~~add~~ adding an appropriately protected monomer or oligomer and ~~couple~~ coupling it to the monomer or oligomer that is attached to the support, to form a covalent bond; ~~characterized in that during the process,~~ wherein a salt $(X^{n+})_m (Y^{m-})_n$ which is soluble in a solvent used in this ~~process, is added,~~ process is added, ~~and~~ wherein, if the salt $(X^{n+})_m (Y^{m-})_n$ is added in step c), the solvent is neither a chloroform/phenol nor a chloroform/trifluoroethanol mixture.
3. (currently amended) A process for attaching an α -amino protected amino acid or peptide having an unprotected C-terminus to another amino acid or peptide which is protected by an α - amino protecting group and which is attached to a support during solid phase peptide synthesis comprising ~~the following steps:~~
 - a) ~~cleave~~ cleaving the α -amino protecting group from the amino acid or peptide attached to the support; ~~and then~~
 - b) ~~perform~~ performing a thorough washing; ~~and then~~

- c) ~~add~~ adding an α -amino protected amino acid or peptide having an unprotected C-terminus and ~~couple~~ coupling it to the amino acid or peptide that is attached to the support and that now has an unprotected N-terminus, to form an amide bond;
~~characterized in that during the process, wherein~~ a salt $(X^{n+})_m(Y^{m-})_n$, which is soluble in a solvent used in this ~~process, is added, process is added, and~~ wherein, if the salt $(X^{n+})_m(Y^{m-})_n$ is added in step c), the solvent is neither a chloroform/phenol nor a chloroform/trifluoroethanol mixture.
4. (currently amended) ~~A process~~ The process according to ~~claim 2 or 3~~ claim 2, which additionally comprises the following step:
- d) ~~perform~~ performing a thorough washing;
 wherein step d) is performed after step c).
5. (currently amended) A process for attaching an α -amino protected amino acid or peptide having an unprotected C-terminus to another amino acid or peptide which is protected by an α -amino protecting group and which is attached to a support during solid phase peptide synthesis ~~comprising the following steps:~~
- a) ~~cleave~~ cleaving the α -amino protecting group from the amino acid or peptide attached to the support;
- b) ~~perform~~ performing a thorough washing;
- c) ~~add~~ adding an α -amino protected amino acid or peptide having an unprotected C-terminus and ~~couple~~ coupling it to the amino acid or peptide that is attached to the support and that now has an unprotected N-terminus, to form an amide bond; and
- d) ~~perform~~ performing another thorough washing;
~~characterized in that wherein~~ at least in step a), a salt $(X^{n+})_m(Y^{m-})_n$, which is soluble in a solvent used in this step, is added.
6. (currently amended) A process for attaching an α -amino protected amino acid or peptide having an unprotected C-terminus to another amino acid or peptide which is protected by an

α -amino protecting group and which is attached to a support during solid phase peptide synthesis comprising the following steps:

- a) ~~cleave~~ cleaving the α -amino protecting group from the amino acid or peptide attached to the support;
 - b) ~~perform~~ performing a thorough washing;
 - c) ~~add~~ adding an α -amino protected amino acid or peptide having an unprotected C-terminus and ~~couple~~ coupling it to the amino acid or peptide that is attached to the support and that now has an unprotected N-terminus, to form an amide bond;
 - d) ~~perform~~ performing another thorough washing; and
- characterized in that wherein at least in step b), a salt $(X^{n+})_m (Y^{m-})_n$, which is soluble in a solvent used in this step, is added.

7. (currently amended) A process for attaching an α -amino protected amino acid or peptide having an unprotected C-terminus to another amino acid or peptide which is protected by an α -amino protecting group and which is attached to a support during solid phase peptide synthesis comprising the following steps:

- a) ~~cleave~~ cleaving the α -amino protecting group from the amino acid or peptide attached to the support;
 - b) ~~perform~~ performing a thorough washing;
 - c) ~~add~~ adding an α -amino protected amino acid or peptide having an unprotected C-terminus and ~~couple~~ coupling it to the amino acid or peptide that is attached to the support and that now has an unprotected N-terminus, to form an amide bond; and
 - d) ~~perform~~ performing another thorough washing;
- characterized in that wherein at least in step c), a salt $(X^{n+})_m (Y^{m-})_n$, which is soluble in a solvent used in this step, is added, and wherein the solvent is neither a chloroform/phenol nor a chloroform/trifluoroethanol mixture.

8. (currently amended) A process for attaching an α -amino protected amino acid or peptide having an unprotected C-terminus to another amino acid or peptide which is protected by an

α -amino protecting group and which is attached to a support during solid phase peptide synthesis comprising the following steps:

- a) ~~leave~~ cleaving the α -amino protecting group from the amino acid or peptide attached to the support;
 - b) ~~perform~~ performing a thorough washing;
 - c) ~~add~~ adding an α -amino protected amino acid or peptide having an unprotected C-terminus and ~~couple~~ coupling it to the amino acid or peptide that is attached to the support and that now has an unprotected N-terminus, to form an amide bond; and
 - d) ~~perform~~ performing another thorough washing:
- characterized in that wherein at least in step d), a salt $(X^{n+})_m (Y^{m-})_n$, which is soluble in a solvent used in this step, is added.

9. (currently amended) ~~A process~~ The process according to ~~any of claims 1 to 8~~ claim 1, wherein the salt $(X^{n+})_m (Y^{m-})_n$ is selected from the group consisting of quaternary ammonium salts, ionic liquids, phosphonium salts, sulfonium salts, inorganic salts ~~or~~ and any mixture thereof.
10. (currently amended) ~~A process~~ The process according to claim 9 wherein $(Y^{m-})_n$ is selected from the group consisting of fluoride, chloride, bromide, iodide, hydroxide, carbonate, hydrogenocarbonate, nitrate, phosphate, hydrogenophosphate, dihydrogenophosphate, tetrafluoroborate, hexafluorophosphate, acetate, carboxylates, cyanides, isocyanates, tetraalkylborates, tetra-arylborates, trifluoroacetate, tosylate, mesylate ~~or~~ and any mixture thereof.
11. (currently amended) ~~A process~~ The process according to claim 9 wherein the quaternary ammonium salt is selected from the group consisting of benzyltrimethylammonium hydroxide, benzyltrimethylammonium chloride ~~or~~ and benzyltrimethylammonium carbonate, the phosphonium salt is tetrabutylphosphonium bromide and the sulfonium salt is triethylsulfonium tetrafluoroborate.

12. (currently amended) ~~A-process~~ The process according to ~~any of claims 2 to 11~~ claim 2, wherein the salt added in step a), b), c) or d) is also added in one or more of the other steps.
13. (currently amended) ~~A-process~~ The process according to ~~any of claims 3 to 12~~ claim 3, wherein the α -amino protecting group is Fmoc (9-fluorenylmethoxycarbonyl) or Nsc (p-Nitrophenylsulphonylethoxycarbonate) or any other base-cleavable protecting group.
14. (currently amended) ~~A-process~~ The process according to ~~any of claims 3 to 12~~ claim 3, wherein the α -amino protecting group is Boc (tert-butoxycarbonyl), Trt (trityl), Bpoc (2-p-Biphenylisopropylloxycarbonyl) or any other acid-cleavable protecting group.
15. (currently amended) ~~A-process~~ The process according to ~~any of claims 3 to 12~~ claim 3, wherein the α -amino protecting group is selected so that neither acid nor base treatment is required for its cleavage.
16. (currently amended) ~~A-process~~ The process for synthesising a peptide comprising:
- a) attaching a first amino acid or peptide, having an α -amino protecting group, via its C-terminus to a functionalized support;
 - b) ~~perform~~ performing the process according to ~~any of claims 3 to 15~~ claim 3 with the following amino acid or peptide foreseen in the sequence;
 - c) ~~repeat step b'~~ repeating step b) with the appropriate amino acids or peptides until the desired sequence is achieved; and
 - d) ~~cleave~~ cleaving the assembled peptide from the support by an appropriate method.
17. (canceled) ~~Use of a salt $(X_n^+)_m(Y_m^-)_n$ in solid phase peptide synthesis for improving the washing of the peptide resin.~~
18. (canceled) ~~Use according to claim 17 for improving the elimination of excess amino acids or cleavage reagents.~~